

Claims

1.- A process for producing pitches from coal tars and distillates thereof, **characterized in** 5 that the process is carried out in three steps under mild conditions of pressure and temperature, said steps being: oxidative thermal treatment using as reagent air, oxygen, low-oxygen air, or mixtures thereof; thermal treatment under inert atmosphere, and fractional distillation.

10 2.- The process of claim 1, **characterized in** that the oxidative thermal treatment step is carried out at a temperature of less than 400° C, a pressure of less than 10 bar g and a residence time in the range of 2-10 seconds, and preferably 350-400° C, 5-10 bar g and 6-10 seconds, using as reagent air, oxygen, low-oxygen air, or mixtures thereof.

15 3.- The process of claims 1 and 2, **characterized in** that the thermal treatment step under inert atmosphere is carried out at 340-400° C, less than 10 bar g and a residence time in the range of 3-10 hours, and preferably, 370-400° C, atmospheric pressure and 4-6 hours, in order to stabilize the reaction product.

20 4.- The process of claims 1, 2 and 3, **characterized in** that the fractional distillation step is carried out preferably under vacuum or by stripping with steam or inert gas, in order to adjust the softening point of the pitch.

25 5.- The process of claims 1, 2, 3 and 4, **characterized in** that as a byproduct there is obtained anthracene oil which exhibits an increased concentration of anthracene/phenanthrene.

30 6.- Use of the pitches obtained by the process of claims 1 to 4 in the particular field of carbon precursors.

35 7.- Use of the pitches obtained by the process of claims 1 to 4, for the manufacture of electrodes destined to aluminium industry, graphite electrodes (as a binder pitch or impregnating pitch) and synthetic graphite in general, binders for refractory industry, waterproof materials and electrometallurgical paste.

8.- Use of the anthracene oil obtained as byproduct of the process of claim 5 for the manufacture of anthracene paste.